

BURNER

Abstract

A burner (1) for heat generation, in particular in a gas turbine, is disclosed
5 as well as a method for the stabilization of the flame of a burner (1). The burner (1)
comprises inlet openings (3) for a combustion air stream, at least a swirl generator (2) for
the combustion air stream and one or more first fuel supplies (4) with first fuel outlet
openings (5) for injection of fuel into the combustion air stream. At least one resonance
tube (6) with an open (7) and an essentially closed end (8) is arranged in or at the burner
10 (1), whose closed end (8) is positioned in the region of a flame front (9) which forms
during operation of the burner (1) on the side of the burner (1). An outlet opening (10) of
a supply (11) for a compressible medium is arranged at the open end (7) of the resonance
tube (6). By injection of the compressible medium into the resonance tube (6) when
flame pulsation occur, the compressible medium periodically enters and leaves the
15 resonance tube (6) through the open end (7), by which the closed end (8) of the resonance
tube (6) heats up. This heating up stabilizes the flame.